

Item	RefDes	Cantidad	Valor	Descripción	Encapsulado	Fabricante	MPN	DigiKey_PN
Módulo MCU	U1	1	ESP32-WROOM-32E-N8	Módulo Wi-Fi/BLE 2.4 GHz, 8 MB	Módulo SMD	Espressif Systems	ESP32-WROOM-32E-N8	5407-ESP32-WROOM-32E-
USB–UART bridge	U4	1	CP2102N-A02-GQFN28	Puente USB a UART	QFN-28 (5×5 mm)	Silicon Labs	CP2102N-A02-GQFN28	336-5889-ND
Sensor T/H	U2	1	SHT31-DIS-F2.5KS	temperatura/humedad ±2 %RH, I <sup>2</sup> C	DFN-8 2.5×2.5 mm	Sensirion	SHT31-DIS-F2.5KS	1649-1066-1-ND
LDO 3.3 V	U3, U5	2	3.3 V LDO 800 mA	Regulador LDO 3.3 V	SOT-223	STMicroelectronics	LD1117S33CTR	497-1241-1-ND
Conector USB-C	USB1	1	USB4105-GF-A	Receptáculo USB-C, USB 2.0,	USB4105	GCT	USB4105-GF-A	2073-USB4105-GF-ACT-ND
Diodo TVS ESD	U6, U7, U8	3	5.0 V TVS (ESD)	Protección ESD para USB	SOD-523	onsemi	ESD5D5.0CT1G	ESD5D5.0CT1GOSCT-ND
Diodo Schottky	D1	1	B5819WS	Schottky 40 V / 1 A	SOD-323	MCC	B5819WS-TP	B5819WS-TPMSCT-ND
Transistor NPN	Q1, Q2	2	SS8050	NPN 25 V 1.5 A	SOT-23	MCC	MMSS8050-H-TP	MMSS8050-H-TPMSCT-ND
Pulsador táctil	SW1, SW2	2	PTS645SH50-2 LFS	Pulsador SPST-NO 6×6 mm	THT 6×6 mm	C&K	PTS645SH50-2 LFS	CKN9093-ND
LED rojo	LED1, LED2	2	0603 rojo	LED SMD 0603 rojo	0603	Kingbright	APTD1608SURCK	754-1541-1-ND
Capacitor cerámico	C1–C12	12	0.1 µF 50 V X7R	Desacoplo	0603	Samsung Electro-Mechanics	CL10B104KB8NNNC	1276-1000-1-ND
Resistencia	R1, R2, R3, R6, R7, R8, R9, R10, R11,	12	1 kΩ ±1 % 0.1 W	Res SMD 0603	0603	Yageo	RC0603FR-071KL	311-1.00KHRCT-ND
Resistencia	R4, R5	2	10 kΩ ±1 % 0.1 W	Res SMD 0603	0603	Yageo	RC0603FR-0710KL	311-10.0KHRCT-ND
(Recomendado) Resistencia CC	— (CC1, CC2)	2	5.1 kΩ ±1 % 0.1 W	para CC1/CC2 a GND	0603	Yageo	RC0603FR-075K1L	311-5.10KHRCT-ND